## Normal UCL Statistics for Data Sets with Non-Detects

| | |
|---|---|
| User Selected Options | |
| Date/Time of Computation | 8/29/2013 8:08:09 AM |
| From File | WorkSheet.xls |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| mber of Bootstrap Operations | 2000 |

**Mercury**

### General Statistics

| | | | |
|---|---|---|---|
| Total Number of Observations | 61 | Number of Distinct Observations | 34 |
| Number of Detects | 52 | Number of Non-Detects | 9 |
| Number of Distinct Detects | 34 | Number of Distinct Non-Detects | 3 |
| Minimum Detect | 0.009 | Minimum Non-Detect | 0.02 |
| Maximum Detect | 0.061 | Maximum Non-Detect | 0.04 |
| Variance Detects | 1.3958E-4 | Percent Non-Detects | 14.75% |
| Mean Detects | 0.0333 | SD Detects | 0.0118 |
| Median Detects | 0.034 | CV Detects | 0.354 |
| Skewness Detects | 0.334 | Kurtosis Detects | -0.199 |
| Mean of Logged Detects | -3.47 | SD of Logged Detects | 0.389 |

### Normal GOF Test on Detects Only

| | | |
|---|---|---|
| Shapiro Wilk Test Statistic | 0.976 | **Normal GOF Test on Detected Observations Only** |
| 5% Shapiro Wilk P Value | 0.583 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.0657 | **Lilliefors GOF Test** |
| 5% Lilliefors Critical Value | 0.123 | Detected Data appear Normal at 5% Significance Level |

**Detected Data appear Normal at 5% Significance Level**

### Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|---|---|---|---|
| Mean | 0.0312 | Standard Error of Mean | 0.00162 |
| SD | 0.0123 | 95% KM (BCA) UCL | 0.0335 |
| 95% KM (t) UCL | 0.0339 | 95% KM (Percentile Bootstrap) UCL | 0.0338 |
| 95% KM (z) UCL | 0.0338 | 95% KM Bootstrap t UCL | 0.0339 |
| 90% KM Chebyshev UCL | 0.036 | 95% KM Chebyshev UCL | 0.0382 |
| 97.5% KM Chebyshev UCL | 0.0413 | 99% KM Chebyshev UCL | 0.0473 |

### DL/2 Statistics

| **DL/2 Normal** | | **DL/2 Log-Transformed** | |
|---|---|---|---|
| Mean in Original Scale | 0.0304 | Mean in Log Scale | -3.601 |
| SD in Original Scale | 0.0131 | SD in Log Scale | 0.493 |
| 95% t UCL (Assumes normality) | 0.0332 | 95% H-Stat UCL | 0.0347 |

**DL/2 is not a recommended method, provided for comparisons and historical reasons**

### Suggested UCL to Use

| | | | |
|---|---|---|---|
| 95% KM (t) UCL | 0.0339 | 95% KM (Percentile Bootstrap) UCL | 0.0338 |

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
owever, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statisticia